PATENT CLAIMS

1. A Device for the metered delivery of a viscous liquid, comprising:

a first and second piston,

a pump body with a first drill hole connecting a first chamber serving as an intake chamber and a second chamber serving as a discharge chamber, the first drill hole accommodating the two pistons, wherein a slit is formed between opposite end faces of the pistons, and

a drive mechanism for moving the pistons back and forth, wherein a width of the slit varies during the back and forth movement, the drive mechanism comprising:

a first swivel arm an end of which is rotatable on a first axis and an opposite end of which the first piston is detachably secured to,

a second swivel arm an end of which is rotatable on a second axis running parallel to the first axis and an opposite end of which the second piston is detachably secured to,

a first and second cam disc,

a motor for rotating the first and second cam discs,

a first ball bearing arranged between the first swivel arm and the first cam disc and being in permanent contact with the first swivel arm and with the first cam disk, and

a second ball bearing arranged between the second swivel arm and the second cam disc and being in permanent contact with the second swivel arm and with the second cam disk, whereby a rotating movement of the cam discs is transformed into a back and forth movement of the pistons.

2. The device according to claim 1, wherein the two swivel arms are made of plastic.

3. The device according to claim 1, wherein the diameter of the first drill hole is at least 20 micrometers greater than the diameter of the first piston.

4. The device according to claim 2, wherein the diameter of the first drill hole is at least 20 micrometers greater than the diameter of the

first piston.

5. The device according to claim 1, the pump body comprising a first sleeve incorporating the first drill hole as well as two further drill holes which run orthogonally to the first drill hole and an end of which opens out into the first drill hole and another end of which opens out into the first chamber or the second chamber in the pump body.

6. The device according to claim 2, the pump body comprising a first sleeve incorporating the first drill hole as well as two further drill holes which run orthogonally to the first drill hole and an end of which opens out into the first drill hole and another end of which opens out into the first chamber or the second chamber in the pump body.

7. The device according to claim 5, the pump body further including two blind holes, wherein ends of the first drill hole open out into the blind holes.

8. The device according to claim 7, the pump body further comprising two bearings in each of which a second or third sleeve, respectively, is movably supported, whereby an end of the first piston is secured in the second sleeve and an end of the second piston is secured in the third sleeve, and the device further including a first pin connecting the second sleeve with the first swivel arm and a second pin connecting the third sleeve with the second swivel arm.

9. The device according to claim 6, the pump body further including two blind holes, wherein ends of the first drill hole open out into the blind holes.

10. The device according to claim 9, the pump body further comprising two bearings in each of which a second or third sleeve, respectively, is movably supported, whereby an end of the first piston is secured in the second sleeve and an end of the second piston is secured in the third sleeve, and the device further including a first pin connecting the second sleeve with the first swivel arm and a second pin connecting the third sleeve with the second swivel arm.

11. The device according to claim 5, wherein the first sleeve and the

pump body consist of one piece of material.

12. The device according to claim 6, wherein the first sleeve and the pump body consist of one piece of material.

13. The device according to claim 7, wherein the first sleeve and the pump body consist of one piece of material.

14. The device according to claim 5, further including a cooling element for the active cooling of the pump body.

15. The device according to claim 6, further including a cooling element for the active cooling of the pump body.

16. The device according to claim 7, further including a cooling element for the active cooling of the pump body.

17. A Device for the metered delivery of a viscous liquid, comprising:

a first and second piston, wherein a slit is formed between opposite end faces of the pistons,

a pump body comprising a first sleeve having a first drill hole accommodating the pistons as well as two further drill holes which run orthogonally to the first drill hole and one end of which opens out into the first drill hole and the other end of which opens out into the first chamber or the second chamber in the pump body, and

a drive mechanism for moving the pistons back and forth, wherein a width of the slit varies during the back and forth movement.

18. The device according to claim 17, the pump body further including two blind holes, wherein ends of the drill hole of the first sleeve open out into the blind holes.

19. The device according to claim 17, wherein the sleeve and the pump body consist of one piece of material.

20. The device according to claim 18, wherein the sleeve and the pump body consist of one piece of material.